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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/728,101

12/04/2003

Russell C. McKown

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MUNSCH, HARDT, KOPF & HARR, P.C.  
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EXAMINER

KASRAJAN, ALLAHYAR

ART UNIT

PAPER NUMBER

2609

MAIL DATE

DELIVERY MODE

05/16/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/728,101

Applicant(s)

MCKOWN ET AL.

Examiner

Allahyar Kasraian

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 06/14/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

1. Applicant's claim for domestic priority under 35 U.S.C. 120 is acknowledged.

### ***Information Disclosure Statement***

2. The information disclosure statement submitted on June 14, 2004 has been considered by the Examiner and made of record in the application file.

### ***Claim Objections***

3. **Claim 3** is objected to because of the following informalities:

- a. On line 2 of **claim 3**, delete "a" before "low";

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1-3** are rejected under 35 U.S.C. 102(b) as being anticipated by Kline (U.S. Patent # 5,937,342).

Consider **claim 1**, Kline clearly shows and discloses an apparatus comprising: a subscriber station for communicating with a base station of a fixed wireless access network (see FWT "Fixed Wireless Terminal" 308, 304 in FIG.3, FIG.4, and also FWT in FIG.5); a power line station for communicating over a power line network (see power transfer 300 and 400 and 500 in FIG. 3, FIG. 4 400 and FIG.5); and internetworking logic for communicating between the subscriber station and power line (see FIG. 5 Power Network Interface 502, and line 67 of column 1 and lines 1-2 of column 2, where it says, "the telecommunications equipment attached to the power lines can use the FWT to communicate in wire less fashion to other FWT's in a network or to a base station." )

Consider **claim 2**, Kline clearly shows and discloses a wireless metropolitan area network, comprising: a fixed wireless access network having at least one base station; and a bridge modem, the bridge modem comprising a subscriber station for communicating with the base station of the fixed wireless access network; a power line station for communicating over a power line network; and means for internetworking the subscriber station and power line station (see FIG.3 for wireless metropolitan area network with a fixed wireless terminal, bridge modem (FWT) 308 and a power line station (power transformer) 300. See also FIG.5 that illustrates FWT comprises a base station antenna and a

bridge (transceiver) 504 and Power Network Interface 502. Also read the description in lines 43-65 of column 3 and lines 36-64 of column 4).

Consider **claim 3 as applied to claim 2 above**, Kline clearly shows and discloses the bridge modem is coupled to a low voltage lines of a distribution power transformer (see lines 64-66 of column 1 where it says, "The wireless local loop distribution system (the present invention) uses standard power lines in a home or business to communicate with a fixed wireless terminal," and lines 11-18 of column 2 where it says, "In an electric power distribution system, step-down power transformers are used by a company to convert higher voltage of several kilovolts to the 110/120 volts required by the home. While several homes may be connected to each step-down power transformer, the transformer effectively isolates the homes or business connected to it. This is referred to as a transformer cluster. As a result, any communications signals flowing over the power lines are effectively isolated by the local step-down power transformer.")

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the Examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the Examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Kline (U.S. Patent # 5,937,342)** in view of **Kline (U.S. Patent # 7,103,240 B2)**

Consider **claim 4**, Kline in the patent No. 5,937,342 clearly shows and discloses method of providing broadband access comprising: providing a fixed wireless access network having a least one base station; providing at least one

subscriber station, providing internetworking logic for communicating between the subscriber station and a power line station; connecting the power line station to low voltage power distribution lines of a distribution power transformer; setting up a virtual local area network over lower voltage power distribution lines on the low voltage lines (see FIG.3 for fixed wireless terminal and bridge modem (FWT) 308 with base station antenna, a power transformer 300, subscriber stations 310, 312, and 314. FIG.5 indicates FWT comprises internetworking logic for communicating between the subscriber station and a power line station (Power Network Interface) 502. Also read the description in lines 43-65 of column 3 and lines 36-64 of column 4)

However, Kline in the patent No. 5,937,342 fails to specify providing broadband communication services to one or more predetermined power line stations connected with the power line network.

In the same filed of endeavor, Kline in patent document No. 7,103,240 B2 clearly discloses and specifies broadband communication services to a predetermined power line stations connected with the power line network (see FIG. 1, FIG.5, FIG.6 and lines 6-9 of column 6 where it says, "power line coupler device specially suited for coupling and de-coupling high frequency, broadband signals carried over power lines within a power distribution system")

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate a broadband communication interface as Kline taught in patent No. 7,103,240 to the Fixed

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Wireless Terminal as his shown in his patent No. 5,937,32 for purpose of delivering high-speed network to the customer over power line.

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.
- a. Mollenkopf et al (U.S. Patent # 6,965,303 B2) discloses Power Line Communication and Method
  - b. Hunt et al. (U.S. Patent # 6,885,674 B2) discloses Communications System for Providing Broadband Communications using a Medium Voltage Cable of a Power System
  - c. Boch et al. (U.S. Patent Application Publication # 2002/0128009 A1) discloses Transceiver for Fixed Wireless Access Network Applications
8. Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Hand-delivered responses** should be brought to

Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

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9. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Allahyar Kasraian whose telephone number is (571) 270-1772. The Examiner can normally be reached on Monday-Thursday from 8:00 a.m. to 5:00 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Rafael Pérez-Gutiérrez can be reached on (571) 272-7915. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 571-272-4100.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Allahyar Kasraian  
A.K./ak

May 11, 2007

  
RAFAEL PEREZ-GUTIERREZ  
SUPERVISORY PATENT EXAMINER

5/11/07